

Work Order ID 62433

September 30, 2010 8:00:16 AM



Page 1

Item ID: D4172-047

Accept



Setup Start



Revision ID:

Stop



Item Name: Crossbar Assembly

Start Date: 9/30/10 Start Qty: 5.00



Cust Item ID:

Required Date: 10/15/10 Req'd Qty: 5.00



Customer:

Reference:

Run Start



Approvals: Process Plan: CL Date: 10/9/30 Tooling: _____ Date: _____

Stop



QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
D4172	A								

100

0.00



Small Fab

Memo

0.00

Small Fab

1- Transfer drill holes, deburr and assemble as per dwg

81 10-10-12 (X5)

110

QC5- Inspect part completeness to step on W/O

0.00



QC

Memo

0.00

Quality Control

81010113

(X5)

120

Identify as per dwg & Stock Location: Composites

0.00



Packaging

Memo

0.00

Packaging

81 10 10 13 (X5)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 62433

September 30, 2010 8:00:16 AM



Page 2

Item ID: D4172-047

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Customer:

Reference:

Run Start



Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Stop



QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

130

QC21- Final Inspection - Work Order Release

0.00



QC

Memo

0.00

Quality Control

10/10/18

MF

10-10-18

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

September 30, 2010 8:00:15 AM

Parent Item: D4172-047











Parent Item Name: Crossbar Assembly

Start Date: 9/30/10**Required Date:** 10/15/10

Start Qty: 5.00

Required Qty: 5.00

Comments: IPP Rev:A 10.09.09 new issue DD verf:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D4172-7 		Manufactured	No			100	Each	0.0000	1	5			
Crossbar						B62426 x 5				RT	10-10-07		
D4172-9 		Manufactured	No			100	Each	0.0000	1	5			
Angle						B62423 x 5				RT	10-10-07		
D4172-10 		Manufactured	No			100	Each	0.0000	1	5			
Angle						B62424 x 5				RT	10-10-07		
MS21075L4 N  10/10/02		Purchased	No			100	Each	23.0000	6	30			
Nutplate						M 115837 x 7				RT	10-10-07		
					<u>Location</u>				<u>Loc Qty</u>				
					ST303				23				
					115708				23				
MS20426AD3  5 10/10/02		Purchased	No			100	Each	6,356.000	8	40			
RIVET						M 4179				RT	10-10-07		
					<u>Location</u>				<u>Loc Qty</u>				
					ST316				6356				
					C104274				2356				
					110398				4000				

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

Page 2

September 30, 2010 8:00:15 AM

Work Order ID: 62433

Parent Item: D4172-047

Parent Item Name: Crossbar Assembly

Start Date: 9/30/10

Required Date: 10/15/10

Start Qty: 5.00

Required Qty: 5.00

MS20426AD3-7

Purchased

No

100

Each

1,450.000

4

20



W 17694



AT 10-10-07

Rivet

Location

Loc Qty

Loc Code

ST316

1450

~~105055~~

1450

~~K20~~

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

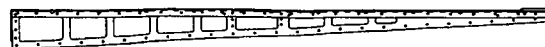
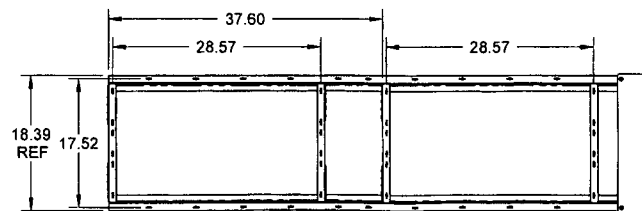
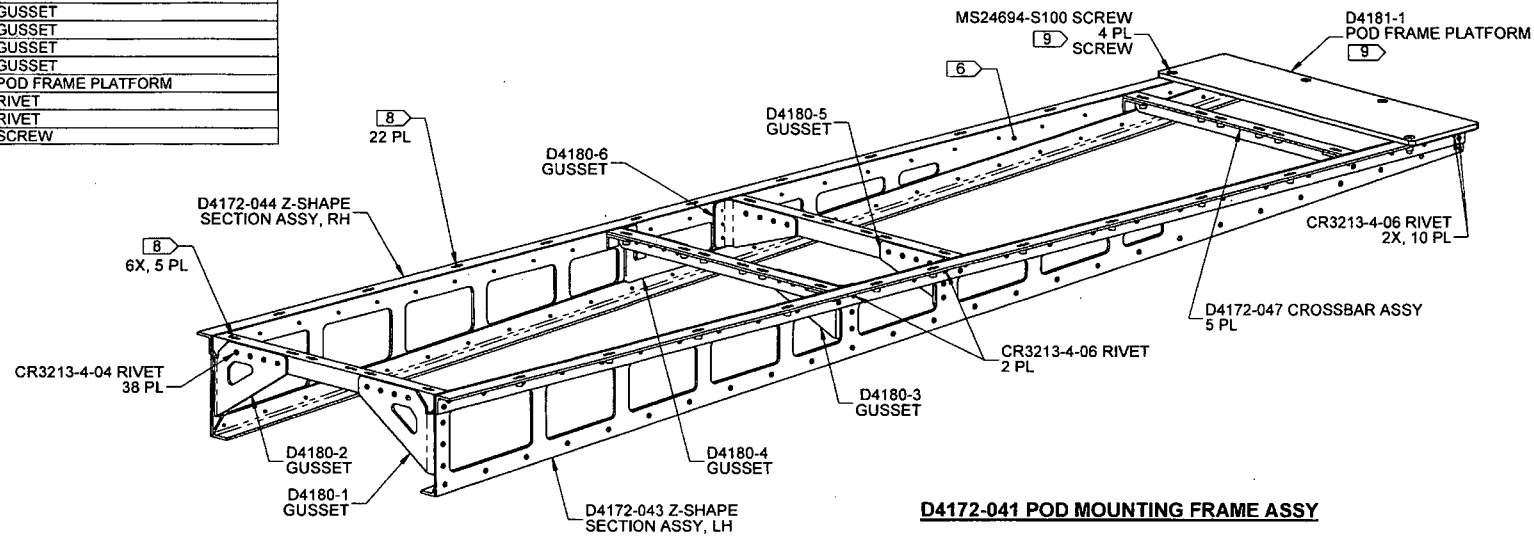
Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

ITEM	QTY -041	P/N	DESCRIPTION
	X	D4172-041	POD MOUNTING FRAME
1	1	D4172-043	Z-SHAPE SECTION ASSY, LH
2	1	D4172-044	Z-SHAPE SECTION ASSY, RH
3	5	D4172-047	CROSSBAR ASSY
4	1	D4180-1	GUSSET
5	1	D4180-2	GUSSET
6	1	D4180-3	GUSSET
7	1	D4180-4	GUSSET
8	1	D4180-5	GUSSET
9	1	D4180-6	GUSSET
10	1	D4181-1	POD FRAME PLATFORM
11	38	CR3213-4-04	RIVET
12	24	CR3213-4-06	RIVET
13	4	MS24694-S100	SCREW



SUPPLEMENTAL VIEWS

D4172-041 POD MOUNTING FRAME ASSY

NOTES:

- 1) MATERIAL: NONE
- 2) FINISH: POWDER COAT "GREY SANDTEX" (4.3.5.6) PER DART QSI 005 4.3
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY PER DART QSI 044 6.1 (PERMANENT INK MARKER)
- 7) WEIGHT: 15.0 lbs
- 8) MASK PRIOR TO POWDER COATING
- 9) INSTALL AFTER POWDER COATING

RELEASED
2010-09-29
MP

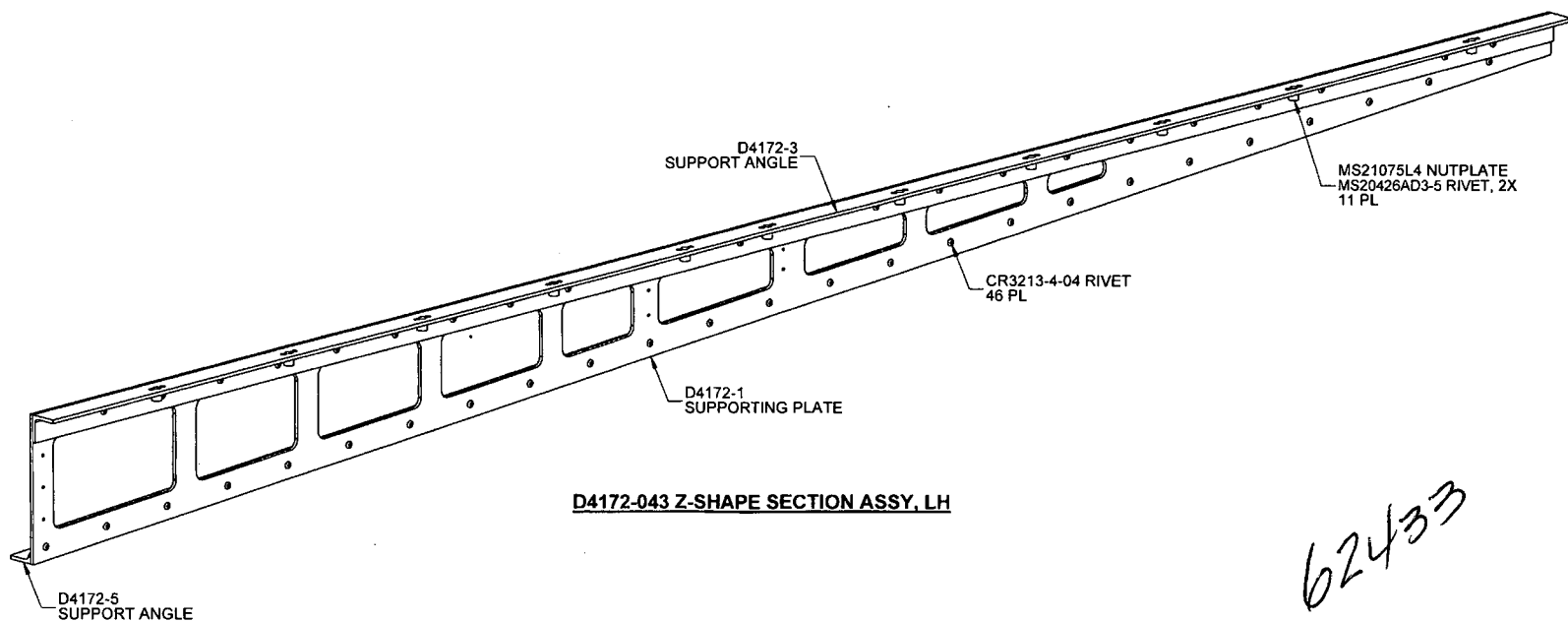
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REV.		BY	DATE
DESIGN	J		
DRAWN	B		
CHECKED	R		
MFG APPR.	N		
APPROVED	MP		
DE APPR.	H		
DATE	10.09.15		

DART AEROSPACE LTD
HAWKESBURY, ONTARIO, CANADA

DRAWING NO.
D4172
REV. A
SHEET 1 OF 7
TITLE
POD MOUNTING FRAME ASSY
SCALE
NTS

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ITEM	QTY -043	P/N	DESCRIPTION
	X	D4172-043	Z-SHAPE SECTION ASSY, LH
1	1	D4172-1	SUPPORTING PLATE
2	1	D4172-3	SUPPORT ANGLE
3	1	D4172-5	SUPPORT ANGLE
4	46	CR3213-4-04	RIVET
5	22	MS20426AD3-5	RIVET
6	11	MS21075L4	NUT PLATE



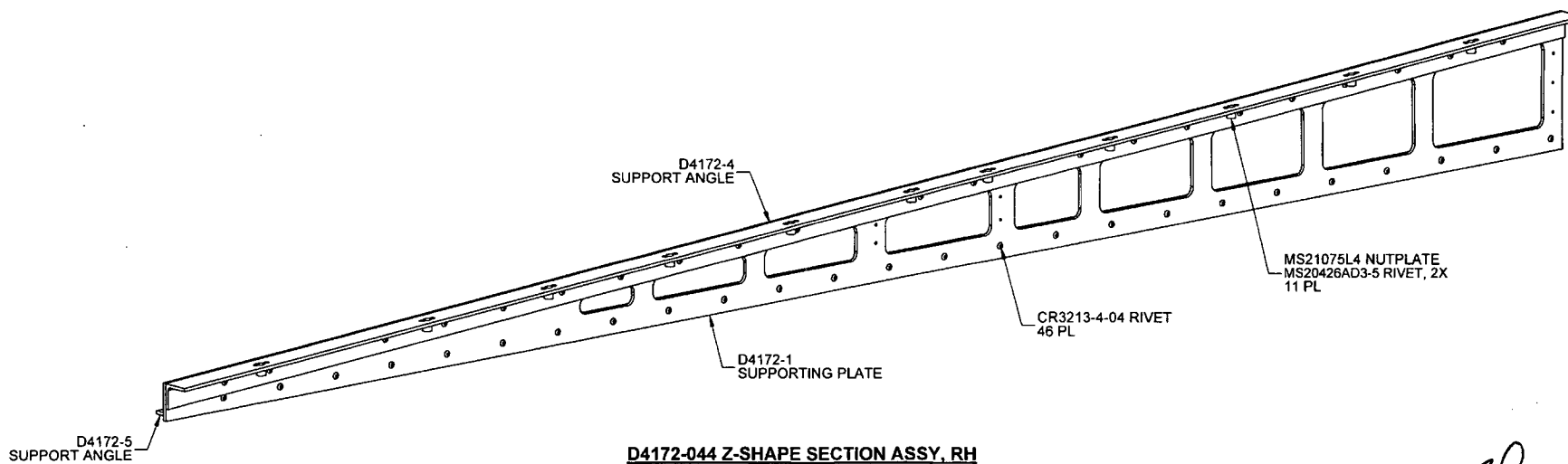
- NOTES:
- 1) MATERIAL: NONE
 - 2) FINISH: NONE
 - 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
 - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
 - 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
 - 6) IDENTIFICATION: NONE
 - 7) WEIGHT: 2.13 lbs

DESIGN	J	DART AEROSPACE LTD	
DRAWN	J	HAWKESBURY, ONTARIO, CANADA	
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MFG. APPR.	RS	D4172	SHEET 2 OF 7
APPROVED	12	TITLE	SCALE
DE APPR.	A	POD MOUNTING FRAME ASSY NTS	
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MD

62433

ITEM	QTY -044	P/N	DESCRIPTION
	X	D4172-044	Z-SHAPE SECTION ASSY, RH
1	1	D4172-1	SUPPORTING PLATE
2	1	D4172-4	SUPPORT ANGLE
3	1	D4172-5	SUPPORT ANGLE
4	46	CR3213-4-04	RIVET
5	22	MS20426AD3-5	RIVET
6	11	MS21075L4	NUT PLATE

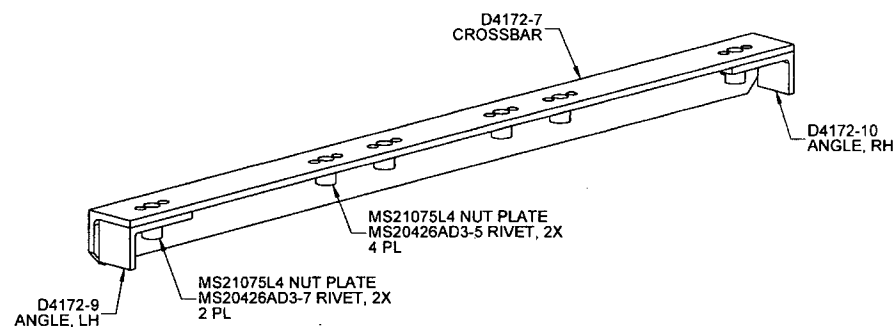


NOTES:
 1) MATERIAL: NONE
 2) FINISH: NONE
 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
 4) UNITS: INCHES UNLESS OTHERWISE NOTED
 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
 6) IDENTIFICATION: NONE
 7) WEIGHT: 2.14 lbs

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MFG. APPR.	R	D4172	SHEET 3 OF 7
APPROVED	R	TITLE	SCALE
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 2010-09-29
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ITEM	QTY -047	P/N	DESCRIPTION
	X	D4172-047	CROSSBAR ASSY
1	1	D4172-7	CROSSBAR
2	1	D4172-9	ANGLE
3	1	D4172-10	ANGLE
4	6	MS21075L4	NUT PLATE
5	8	MS20426AD3-5	RIVET
6	4	MS20426AD3-7	RIVET



D4172-047 CROSSBAR ASSY

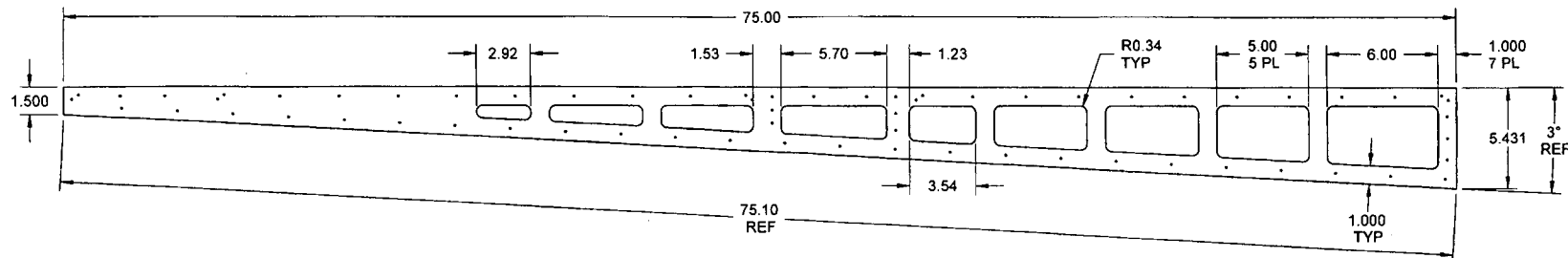
- NOTES:
- 1) MATERIAL: NONE
 - 2) FINISH: NONE
 - 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
 - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
 - 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
 - 6) IDENTIFICATION: NONE
 - 7) WEIGHT: 0.18 lbs

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MFG. APPR.		D4172	SHEET 4 OF 7
APPROVED		TITLE	SCALE
DE APPR.		POD MOUNTING FRAME ASSY NTS	
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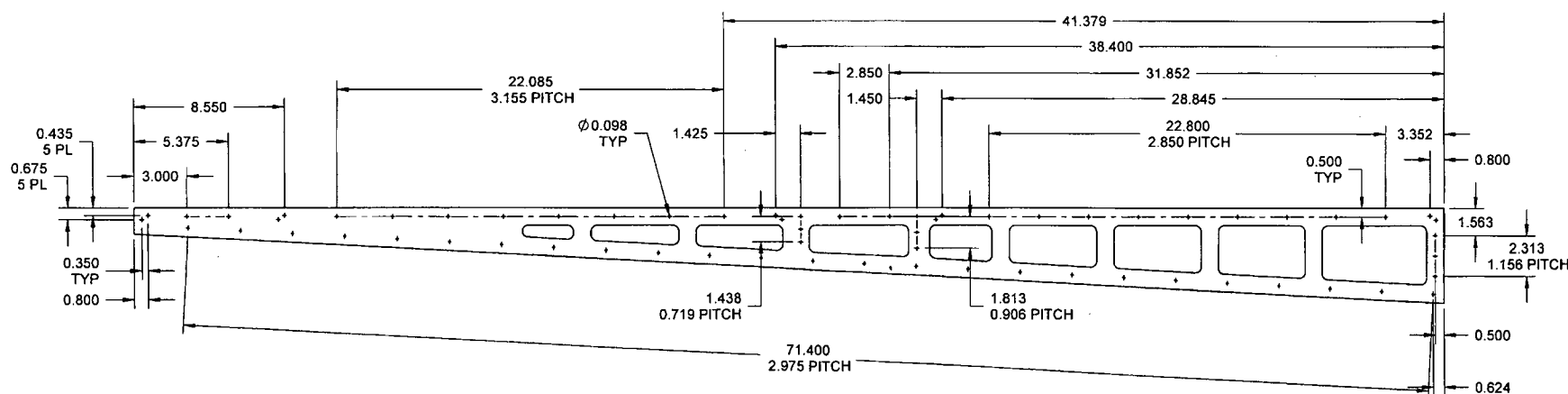
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2010-09-29
[Signature]

62430

8 7 6 5 4 3 2 1



D4172-1 SUPPORTING PLATE



SUPPLEMENTAL VIEW

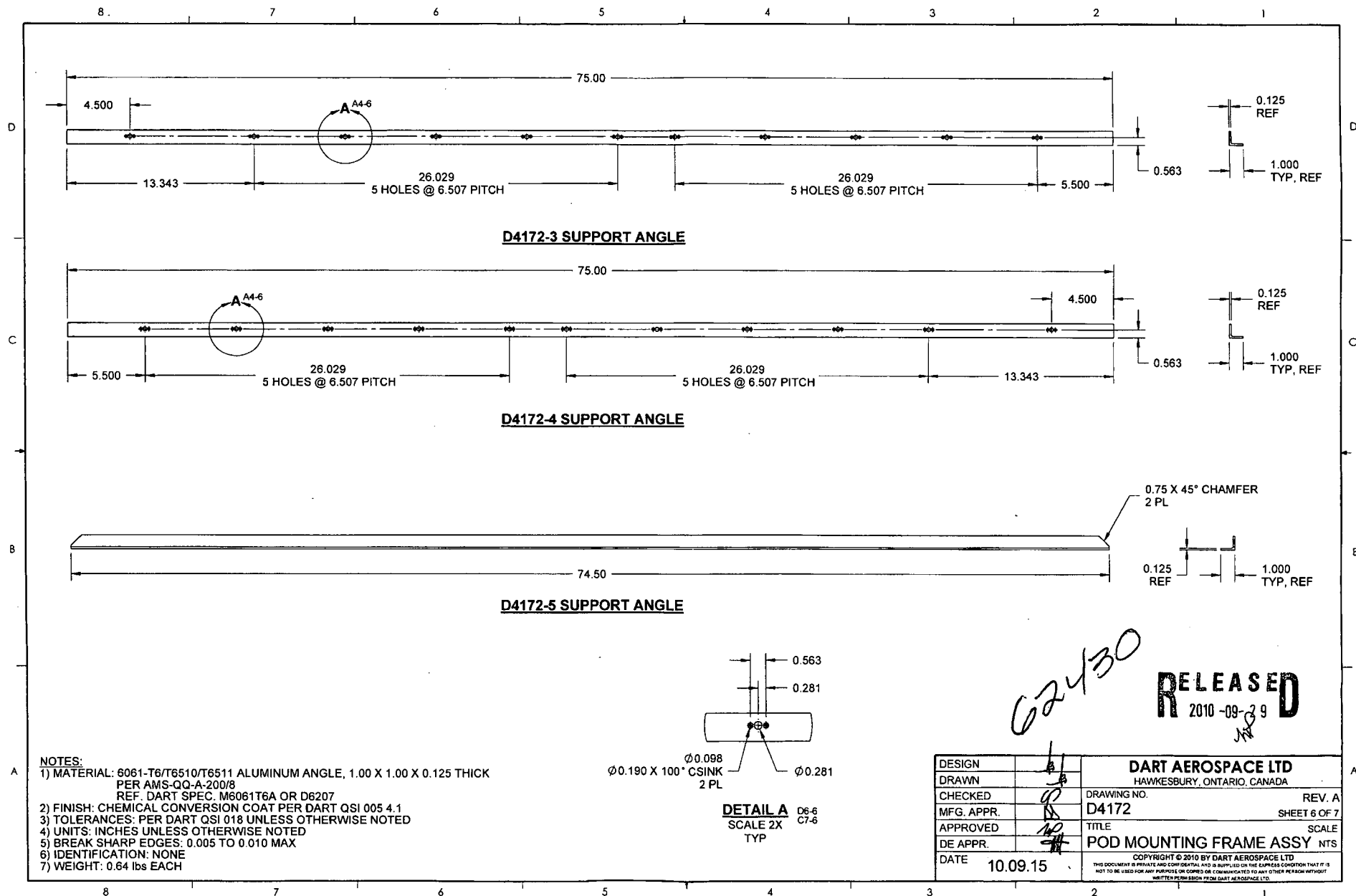
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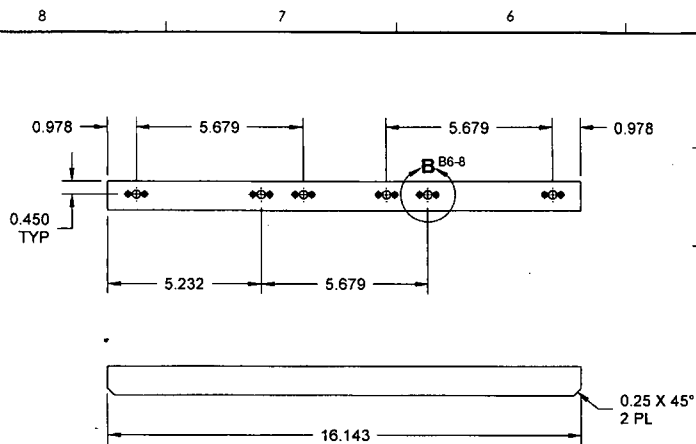
- 1) MATERIAL: 6061-T6/T62 ALUMINUM SHEET, 0.125 THICK PER QQ-A-250/11 OR AMS-QQ-A-250/11 OR AMS 4025 OR AMS 4027 OR ASTM B209 REF. DART SPEC. M6061T6S.125
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: 0.78 lbs

62430

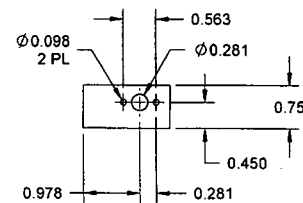
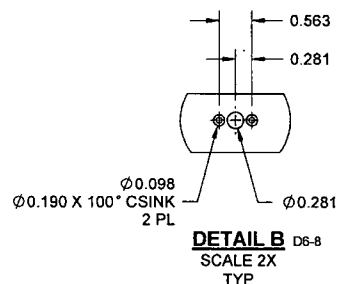
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DRAWN		HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO.	REV. A
MFG. APPR.		D4172	SHEET 5 OF 7
APPROVED		TITLE	SCALE
DE APPR.		POD MOUNTING FRAME ASSY	NTS
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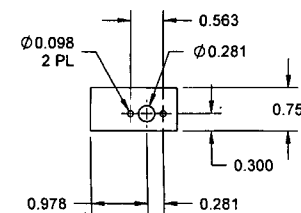




D4172-7 CROSSBAR



D4172-9 ANGLE



D4172-10 ANGLE

NOTES:

- 1) MATERIAL
D4172-7: 6061-T6/T6510/T6511 ALUMINUM ANGLE, 1.00 X 1.00 X 0.125 THICK
PER AMS-QQ-A-200/8
REF. DART SPEC. M6061T6A OR D6207
D4172-9/-10: 6061-T6/T6510/T6511 ALUMINUM ANGLE, 1.50 X 1.50 X 0.125 THICK
PER AMS-QQ-A-200/8
REF. DART SPEC. M6061T6A OR D6203
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: D4172-7 = 0.14 lbs; D4172-9/-10 = 0.01 lbs EACH

DESIGN		DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA		
DRAWN				
CHECKED			DRAWING NO.	REV. A
MFG. APPR.			D4172	SHEET 7 OF 7
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62430